```
RRRRRRRRRRRR        UUU         UUU  NNN         NNN    000000000    FFFFFFFFFFFFFFF  FFFFFFFFFFFFFFF
RRRRRRRRRRRR        UUU         UUU  NNN         NNN    000000000    FFFFFFFFFFFFFFF  FFFFFFFFFFFFFFF
RRRRRRRRRRRR        UUU         UUU  NNN         NNN    000000000    FFFFFFFFFFFFFFF  FFFFFFFFFFFFFFF
RRR        RRR      UUU         UUU  NNN         NNN  000       000  FFF              FFF
RRR        RRR      UUU         UUU  NNN         NNN  000       000  FFF              FFF
RRR        RRR      UUU         UUU  NNN         NNN  000       000  FFF              FFF
RRR        RRR      UUU         UUU  NNNNNN      NNN  000       000  FFF              FFF
RRR        RRR      UUU         UUU  NNNNNN      NNN  000       000  FFF              FFF
RRR        RRR      UUU         UUU  NNNNNN      NNN  000       000  FFF              FFF
RRRRRRRRRRRR        UUU         UUU  NNN NNN     NNN  000       000  FFFFFFFFFFF      FFFFFFFFFFF
RRRRRRRRRRRR        UUU         UUU  NNN NNN     NNN  000       000  FFFFFFFFFFF      FFFFFFFFFFF
RRRRRRRRRRRR        UUU         UUU  NNN NNN     NNN  000       000  FFFFFFFFFFF      FFFFFFFFFFF
RRR    RRR          UUU         UUU  NNN         NNN  000       000  FFF              FFF
RRR    RRR          UUU         UUU  NNN   NNNNNN     000       000  FFF              FFF
RRR     RRR         UUU         UUU  NNN   NNNNNN     000       000  FFF              FFF
RRR       RRR       UUU         UUU  NNN         NNN  000       000  FFF              FFF
RRR        RRR      UUU         UUU  NNN         NNN  000       000  FFF              FFF
RRR        RRR      UUU         UUU  NNN         NNN  000       000  FFF              FFF
RRR         RRR     UUUUUUUUUUUUUUU  NNN         NNN    000000000    FFF              FFF
RRR         RRR     UUUUUUUUUUUUUUU  NNN         NNN    000000000    FFF              FFF
RRR         RRR     UUUUUUUUUUUUUUU  NNN         NNN    000000000    FFF              FFF
```

```
  SSSSSSS   KK     KK  PPPPPPP    SSSSSSS   EEEEEEEEEE  PPPPPPP
  SSSSSSS   KK     KK  PPPPPPP    SSSSSSS   EEEEEEEEEE  PPPPPPP
SS          KK    KK   PP    PP  SS         EE          PP    PP
SS          KK   KK    PP    PP  SS         EE          PP    PP
SS          KK  KK     PP    PP  SS         EE          PP    PP
SS          KK KK      PP    PP  SS         EE          PP    PP
  SSSSSS    KKKKK      PPPPPPP     SSSSSS    EEEEEEE     PPPPPPP
  SSSSSS    KKKKK      PPPPPPP     SSSSSS    EEEEEEE     PPPPPPP
      SS    KK KK      PP              SS    EE          PP
      SS    KK  KK     PP              SS    EE          PP
      SS    KK   KK    PP              SS    EE          PP       ....
      SS    KK    KK   PP              SS    EE          PP       ....
SSSSSSSS    KK     KK  PP         SSSSSSSS   EEEEEEEEEE  PP       ....
SSSSSSSS    KK     KK  PP         SSSSSSSS   EEEEEEEEEE  PP       ....


LL              IIIIII     SSSSSSS
LL              IIIIII     SSSSSSS
LL                II      SS
LL                II      SS
LL                II      SS
LL                II        SSSSSS
LL                II        SSSSSS
LL                II              SS
LL                II              SS
LL                II              SS
LL                II              SS
LLLLLLLLLL      IIIIII     SSSSSSS
LLLLLLLLLL      IIIIII     SSSSSSS
```

```
    1    0001   0   %TITLE 'Skips <comma-separator>s'
    2    0002   0   MODULE SKPSEP (
    3    0003   0                   IDENT = 'V04-000'
    4  P 0004   0   %BLISS32[,
    5  P 0005   0            ADDRESSING_MODE(EXTERNAL=LONG_RELATIVE,NONEXTERNAL=LONG_RELATIVE)
    6    0006   0            ]
    7    0007   0                   ) =
    8    0008   1   BEGIN
    9    0009   1
   10    0010   1   !******************************************************************************
   11    0011   1   !*                                                                            *
   12    0012   1   !*   COPYRIGHT (c) 1978, 1980, 1982, 1984 BY                                   *
   13    0013   1   !*   DIGITAL EQUIPMENT CORPORATION, MAYNARD, MASSACHUSETTS.                    *
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   18    0018   1   !*   INCLUSION OF THE ABOVE COPYRIGHT NOTICE. THIS SOFTWARE OR  ANY  OTHER     *
   19    0019   1   !*   COPIES THEREOF MAY NOT BE PROVIDED OR OTHERWISE MADE AVAILABLE TO ANY     *
   20    0020   1   !*   OTHER PERSON.  NO TITLE TO AND OWNERSHIP OF  THE  SOFTWARE IS  HEREBY     *
   21    0021   1   !*   TRANSFERRED.                                                              *
   22    0022   1   !*                                                                            *
   23    0023   1   !*   THE INFORMATION IN THIS SOFTWARE IS  SUBJECT TO CHANGE WITHOUT NOTICE     *
   24    0024   1   !*   AND  SHOULD  NOT  BE  CONSTRUED AS  A COMMITMENT BY DIGITAL EQUIPMENT     *
   25    0025   1   !*   CORPORATION.                                                              *
   26    0026   1   !*                                                                            *
   27    0027   1   !*   DIGITAL ASSUMES NO RESPONSIBILITY FOR THE USE  OR  RELIABILITY OF ITS     *
   28    0028   1   !*   SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.                   *
   29    0029   1   !*                                                                            *
   30    0030   1   !*                                                                            *
   31    0031   1   !******************************************************************************
   32    0032   1
   33    0033   1   !++
   34    0034   1   ! FACILITY:      DSR (Digital Standard RUNOFF) / DSRPLUS
   35    0035   1   !
   36    0036   1   ! ABSTRACT: Skips a <comma-separator> (i.e., 'spaces "," spaces')
   37    0037   1   !
   38    0038   1   !
   39    0039   1   ! ENVIRONMENT: Transportable
   40    0040   1   !
   41    0041   1   ! AUTHOR: R.W.Friday     CREATION DATE: January, 1979
   42    0042   1   !
```

SKPSEP
V04-000
Skips <comma-separator>s
Revision History
M 6
16-Sep-1984 01:48:09   VAX-11 Bliss-32 V4.0-742
14-Sep-1984 13:08:11   [RUNOFF.SRC]SKPSEP.BLI;1
Page 2
(2)

```
 44     0043  1 %SBTTL 'Revision History'
 45     0044  1 !
 46     0045  1 ! MODIFIED BY:
 47     0046  1 !
 48     0047  1 !    003      REM00003      Ray Marshall    07-Mar-1983
 49     0048  1 !             Global edit of all modules. Updated module names, idents,
 50     0049  1 !             copyright dates. Changed require files to BLISS library.
 51     0050  1 !
 52     0051  1 !--
```

```
   54      0052  1  %SBTTL 'Module Level Declarations'
   55      0053  1  !
   56      0054  1  ! TABLE OF CONTENTS:
   57      0055  1  !
   58      0056  1  !
   59      0057  1  ! INCLUDE FILES:
   60      0058  1  !
   61      0059  1
   62      0060  1  LIBRARY 'NXPORT:XPORT';               ! XPORT Library
   63      0061  1  REQUIRE 'REQ:RNODEF';                 ! RUNOFF variant definitions
   64      0192  1
   65    U 0193  1  %IF DSRPLUS %THEN
   66    U 0194  1  LIBRARY 'REQ:DPLLIB';                 ! DSRPLUS BLISS Library
   67      0195  1  %ELSE
   68      0196  1  LIBRARY 'REQ:DSRLIB';                 ! DSR BLISS Library
   69      0197  1  %FI
   70      0198  1
   71      0199  1  !
   72      0200  1  ! EXTERNAL REFERENCES:
   73      0201  1  !
   74      0202  1
   75      0203  1  EXTERNAL
   76      0204  1      KHAR;
```

```
 78   0205  1  %SBTTL 'SKPSEP  --'
 79   0206  1  GLOBAL ROUTINE skpsep (ira) =
 80   0207  1
 81   0208  1  !++
 82   0209  1  ! FUNCTIONAL DESCRIPTION:
 83   0210  1  !
 84   0211  1  ! Skips over a comma surrounded by any number of spaces and tabs
 85   0212  1  ! until neither is found.
 86   0213  1  !
 87   0214  1  ! FORMAL PARAMETERS:
 88   0215  1  !
 89   0216  1  !     IRA is the string that is to be scanned.
 90   0217  1  !
 91   0218  1  ! IMPLICIT INPUTS:        None
 92   0219  1  !
 93   0220  1  ! IMPLICIT OUTPUTS:       None
 94   0221  1  !
 95   0222  1  ! ROUTINE VALUE:
 96   0223  1  ! COMPLETION CODES:
 97   0224  1  !
 98   0225  1  !     Returns TRUE if a comma was found, else FALSE.
 99   0226  1  !
100   0227  1  ! SIDE EFFECTS:           None
101   0228  1  !
102   0229  1  !--
103   0230  1
104   0231  2      BEGIN
105   0232  2      LOCAL
106   0233  2          result;
107   0234  2
108   0235  2      MAP
109   0236  2          ira : REF fixed_string;
110   0237  2
111   0238  2      result=false;                                !Assume no comma.
112   0239  2
113   0240  2      !Skip spaces and tabs before the comma.
114   0241  3      WHILE (.khar EQL %C' ')                       !space
115   0242  3          OR (.khar EQL %O'011')                    !tab
116   0243  2      DO
117   0244  2          kcns ();
118   0245  2
119   0246  2      !Skip the comma
120   0247  2      IF  .khar EQL %C','   THEN
121   0248  3          BEGIN
122   0249  3          kcns ();
123   0250  3          result=true;
124   0251  2          END;
125   0252  2
126   0253  2      !Skip spaces and tabs after the comma.
127   0254  3      WHILE (.khar EQL %C' ')                       !space
128   0255  3          OR (.khar EQL %O'011')                    !tab
129   0256  2      DO
130   0257  2          kcns ();
131   0258  2
132   0259  2      !Return the result of the scan.
133   0260  2      RETURN .result
134   0261  2
```

SKPSEP
V04-000
Skips <comma-separator>s
SKPSEP --
C 7
16-Sep-1984 01:48:09   VAX-11 Bliss-32 V4.0-742
14-Sep-1984 13:08:11   [RUNOFF.SRC]SKPSEP.BLI;1
Page 5
     (4)

```
; 135      0262 1    END;                                          !End of SKPSEP

                                                    .TITLE  SKPSEP Skips <comma-separator>s
                                                    .IDENT  \V04-000\

                                                    .EXTRN  KHAR, RINTES

                                                    .PSECT  $CODE$,NOWRT,2

                      000C 00000         .ENTRY  SKPSEP, Save R2,R3                    ; 0206
     53 00000000G EF  9E 00002            MOVAB   KHAR, R3
     52          D4 00009            CLRL    RESULT                                    ; 0238
     51    04    AC  D0 0000B            MOVL    IRA, R1                               ; 0244
     50    0C    A1  9E 0000F            MOVAB   12(R1), R0
     20          63  D1 00013 1$:  CMPL    KHAR, #32                                  ; 0241
     05          13 00016            BEQL    2$
     09          63  D1 00018            CMPL    KHAR, #9                              ; 0242
     18          12 0001B            BNEQ    4$
     60          D5 0001D 2$:  TSTL    (R0)                                           ; 0244
     09          14 0001F            BGTR    3$
     63    00G   8F  9A 00021            MOVZBL  #RINTES, KHAR
     60    01    CE 00025            MNEGL   #1, (R0)
           E9    11 00028            BRB     1$
     63    04    B1  9A 0002A 3$:  MOVZBL  @4(R1), KHAR
     04    A1    D6 0002E            INCL    4(R1)
     60          D7 00031            DECL    (R0)
           DE    11 00033            BRB     1$
     2C          63  D1 00035 4$:  CMPL    KHAR, #44                                  ; 0247
     19          12 00038            BNEQ    7$
     60          D5 0003A            TSTL    (R0)                                      ; 0249
     09          14 0003C            BGTR    5$
     63    00G   8F  9A 0003E            MOVZBL  #RINTES, KHAR
     60    01    CE 00042            MNEGL   #1, (R0)
           09    11 00045            BRB     6$
     63    04    B1  9A 00047 5$:  MOVZBL  @4(R1), KHAR
     04    A1    D6 0004B            INCL    4(R1)
     60          D7 0004E            DECL    (R0)
     52    01    D0 00050 6$:  MOVL    #1, RESULT                                     ; 0250
     20          63  D1 00053 7$:  CMPL    KHAR, #32                                  ; 0254
     05          13 00056            BEQL    8$
     09          63  D1 00058            CMPL    KHAR, #9                             ; 0255
     18          12 0005B            BNEQ    10$
     60          D5 0005D 8$:  TSTL    (R0)                                           ; 0257
     09          14 0005F            BGTR    9$
     63    00G   8F  9A 00061            MOVZBL  #RINTES, KHAR
     60    01    CE 00065            MNEGL   #1, (R0)
           E9    11 00068            BRB     7$
     63    04    B1  9A 0006A 9$:  MOVZBL  @4(R1), KHAR
     04    A1    D6 0006E            INCL    4(R1)
     60          D7 00071            DECL    (R0)
           DE    11 00073            BRB     7$
     50    52    D0 00075 10$: MOVL    RESULT, R0                                     ; 0260
           04 00078            RET                                                     ; 0262

; Routine Size:  121 bytes,     Routine Base:  $CODE$ + 0000
```

```
; 136           0263 1
; 137           0264 1 END                                              !End of module
; 138           0265 0 ELUDOM
```

                              PSECT SUMMARY

```
;
;        Name                          Bytes                        Attributes
;
; $CODE$                                121  NOVEC,NOWRT, RD , EXE,NOSHR, LCL, REL, CON,NOPIC,ALIGN(2)
```

                         Library Statistics

```
;
;                                           -------- Symbols --------      Pages        Processing
;       File                                Total   Loaded   Percent      Mapped       Time
;
; _$255$DUA28:[SYSLIB]XPORT.L32;1            590       0        0          252         00:00.1
; _$255$DUA28:[RUNOFF.SRC]DSRLIB.L32;1      1248       9        0           86         00:00.3
```

                         COMMAND QUALIFIERS

```
;
;     BLISS/CHECK=(FIELD,INITIAL,OPTIMIZE)/LIS=LIS$:SKPSEP/OBJ=OBJ$:SKPSEP MSRC$:SKPSEP/UPDATE=(ENH$:SKPSEP)
;
; Size:          121 code + 0 data bytes
; Run Time:           00:04.2
; Elapsed Time:       00:13.5
; Lines/CPU Min:      3822
; Lexemes/CPU-Min: 14307
; Memory Used:  51 pages
; Compilation Complete
```

STD
LIS

SUBST
LIS

SETDAT
LIS

STC
LIS

TITLES
LIS

STYLE
LIS

SCANT
LIS

TOPPAG
LIS

STKFRM
LIS

SKIPL
LIS

SUBPAG
LIS

SCL
LIS

SKPSEP
LIS

STHL
LIS

SETTIM
LIS